## AMENDMENTS In the Specification

[0322] Suitable metasl metals for use in making the nano-particles, nano-shell nano-particles, nanorod nano-particles, and/or nano-rod nano-shell nano-particles of this invention include, without limitation, any metal capable of forming nano-particles. Non-limiting exemplary examples include non-transition metals, transition metals, lanthanide metals, actinide metals, alloys thereof or mixtures or combinations thereof. Non-limiting exemplary examples of non-transition metals include aluminum (Al), silicon (Si), magnesium (Mg), calcium (Ca), strontium (Sr), barium (Ba), gallium (Ga), germanium (Ge), arsenic (As), selenium (Se), indium (In), tin (Sn), antimony (Sb), tellurium (Te), thallium (Tl), lead (Pb), bismuth (Bi), alloys thereof or mixture or combinations thereof. Nonlimiting exemplary examples of transition metals include scandium (Sc), titanium (Ti), vanadium (V), chromium (Cr), manganese (Mn), iron (Fe), cobalt (Co), nickel (Ni), copper (Cu), zinc (Zn), yttrium (Y), zirconium (Zr), niobium (Nb), molybdenum (Mo), technetium (Tc), ruthenium (Ru), rhodium (Rh), palladium (Pd), silver (Ag), cadmium (Cd), hafnium (Hf), tantalum (Ta), tungsten (W), rhenium (Re), osmium (Os), iridium (Ir), platinum (Pt), gold (Au), mercury (Hg), alloys thereof, or mixtures or combinations thereof. Preferred metals include iron (Fe), ruthenium (Ru), osmium (Os), cobalt (Co), rhodium (Rh), iridium (Ir), nickel (Ni), palladium (Pd), platinum (Pt), copper (Cu), silver (Ag), gold (Au), alloys thereof or mixture or combinations thereof. More preferred metals include the noble metals ruthenium (Ru), rhodium (Rh), palladium (Pd), silver (Ag), osmium (Os), iridium (Ir), platinum (Pt), gold (Au), their alloys or mixtures and combinations thereof.